In the Claims:

Please amend the claims as indicated below.

1. (Currently Amended) A system located at a subscriber's premises, the system comprising: ~~transcoder for~~

an antenna configured to receive, from a satellite, ~~converting~~ a ~~received~~ first digital signal with a first modulation and encoding scheme;

a set-top box configured to receive a second digital signal with a second modulation and encoding scheme; and, ~~the~~

a transcoder that includes ~~comprising:~~

a demodulator ~~that~~ configured to produce ~~produces~~ a demodulated digital stream of data from the received first digital signal;

a modulator in signal communication with the demodulator, ~~where~~ the modulator configured to modulate ~~modulates~~ the demodulated digital stream of data with the second modulation and encoding scheme to produce ~~and produces~~ a new modulated digital stream of data; and

an upconverter in signal communication with the modulator, ~~where~~ the upconverter configured to produce ~~produces~~ the second digital signal by upconverting ~~from~~ the new modulated digital stream of data and to provide the second digital signal to the set-top box.

2. (Currently Amended) The system ~~transcoder~~ of claim 1, wherein the upconverter includes :

an upsampler that receives the new modulated digital stream of data from the modulator and produces an upsampled signal;

a complex mixer in signal communication with the upsampler, where the complex mixer is configured to produce ~~capable of producing~~ an intermediate frequency ("IF") digital signal by upconverting the upsampled signal with an IF carrier signal; and

a combiner in signal communication with the complex mixer, where the combiner is configured to produce ~~capable of producing~~ the second digital signal having sampling replicas from the IF digital signal.

3. (Currently Amended) The system ~~transcoder~~ of claim 2, wherein the second digital signal ~~may~~ includes multiple in-phase and quadrature-phase modulated image replicas.

4. (Currently Amended) The system ~~transcoder~~ of claim 2, wherein a clock signal is input into both the upsampler and a digital-to-analog converter ("DAC") in signal communication with the combiner.

5. (Currently Amended) The system ~~transcoder~~ of claim 4, wherein the complex mixer is connected to a numerically controlled oscillator that produces the IF carrier signal.

6. (Currently Amended) The system ~~transcoder~~ of claim 5, wherein the IF carrier signal is at a lower frequency than the clock signal.

7. (Currently Amended) The system ~~transcoder~~ of claim 5, wherein the numerically controlled oscillator is an internal component of the transcoder.

8. (Currently Amended) The system ~~transcoder~~ of claim 5, wherein the numerically controlled oscillator is an external component of the transcoder.

9. (Currently Amended) The system ~~transcoder~~ of claim 1, wherein the first modulation and encoding scheme is 8-PSK Turbo Coding.

10. (Currently Amended) The system ~~transcoder~~ of claim 9 [[1]], wherein the second modulation and encoding scheme is QPSK.

11. (Currently Amended) A transcoder for use in a system, located at a subscriber's premises, that includes an antenna and a set-top box, the antenna configured to receive, from a satellite, ~~converting~~ a ~~received~~ first digital signal with a first modulation and encoding scheme, and the set-top box configured to receive a second digital signal with a second modulation and encoding scheme, the transcoder comprising:

a demodulator configured to demodulate ~~means for demodulating~~ the received first digital signal to produce a demodulated digital stream of data;

a modulator configured to modulate ~~means for modulating~~ the demodulated digital stream of data with the second modulation and encoding scheme to produce a new modulated stream of data; and

an upconverter configured to upconvert ~~means for upconverting~~ the new modulated digital stream of data to produce the second digital signal, and to provide the second digital signal to the set-top box.

12. (Currently Amended) The transcoder of claim 11, wherein the upconverter ~~means~~ includes:

means for upsampling the modulated digital stream and producing an upsampled signal;

means for mixing the upsampled signal with an intermediate frequency ("IF") carrier signal to produce an IF digital signal; and

means for converting the IF digital signal to the second digital signal having sampling replicas.

13. (Currently Amended) The transcoder of claim 12, wherein the second digital signal ~~may~~ includes multiple in-phase and quadrature-phase modulated image replicas.

14. (Previously Presented) The transcoder of claim 12, wherein a clock signal is input into both the upsampling means and a DAC in signal communication with the converting means.

15. (Previously Presented) The transcoder of claim 14 wherein the mixing means is connected to a numerically controlled oscillator that produces the IF carrier signal.

16. (Previously Presented) The transcoder of claim 15 wherein the IF carrier signal is at a lower frequency than the clock signal.

17. (Previously Presented) The transcoder of claim 12, wherein the mixing means is connected to a numerically controlled oscillator that produces the IF carrier signal that is utilized by the mixing means.

18. (Previously Presented) The transcoder of claim 17, wherein the IF carrier signal is at a lower frequency than the clock signal.

19. (Original) The transcoder of claim 11, wherein the first modulation and encoding scheme is 8-PSK Turbo Coding.

20. (Currently Amended) The transcoder of claim 19 [[11]], wherein the second modulation and encoding scheme is QPSK.

21. (Currently Amended) A method for converting a first digital signal with a first modulation and encoding scheme to a second digital signal with a second modulation and encoding scheme, the method comprising:

receiving, at a subscriber's premises, the first digital signal from a satellite;

demodulating the [[a]] received first digital signal ~~having a received modulation and encoding scheme to generate the first digital signal~~;

modulating the demodulated first digital signal with the second modulation and encoding scheme, wherein the modulating produces a new modulated digital signal; ~~and~~

upconverting the new modulated digital signal to produce the second digital signal; and

providing the second digital signal to a set-top box located at the subscriber's premises.

22. (Previously Presented) The method of claim 21, wherein the step of upconverting includes:

upsampling the new modulated digital signal;

mixing the upsampled new modulated digital signal with an intermediate frequency ("IF") carrier signal to produce an IF digital signal; and

sampling the IF digital signal through a mixer to produce the second digital signal.

23. (Previously Presented) The method of claim 21, wherein the first modulation and encoding scheme is 8-PSK Turbo Coding.

24. (Currently Amended) The method of claim 23 [[21]], wherein the second modulation and encoding scheme is QPSK.